



UNITED STATES DEPARTMENT OF COMMERCE  
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09/284735

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
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#16

DATE MAILED:

### INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):

(1) Terrel Morris, spe (3) Garth Dahlen  
(2) John J. Guarriello (4) \_\_\_\_\_

Date of Interview 1/6/2003

Type: ☐ Telephonic ☐ Televideo Conference ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No If yes, brief description: \_\_\_\_\_

Agreement ☐ was reached. ☐ was not reached.

Claim(s) discussed: all

Identification of prior art discussed: Lohr 4,347,151, Feig 3,711,884,  
JP 61-108700, Wong et al. 5,213,588

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Upon Review,  
the combination of references is invalid. We will remove  
art of record and produce a new office action upon  
reception of amendment to the claims.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☐ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has are ready been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

Examiner Note: You must sign this form unless it is an attachment to another form.

PTO copy

*John J. Guarriello*

## Manual of Patent Examining Procedure, Section 713.04 Substance of Interview must Be Made of Record

Except as otherwise provided, a complete written statement as to the substance of any face-to-face or telephone interview with regard to an application must be made of record in the application, whether or not an agreement with the examiner was reached at the interview.

### §1.133 Interviews

(b) In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111 and 1.135. (35 U.S.C. 132)

§ 1.2. Business to be transacted in writing. All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete a two-sheet carbon interleaf Interview Summary Form for each interview held after January 1, 1978 where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks in neat handwritten form using a ball point pen. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, pointing out typographical errors or unreadable script in Office actions or the like, or resulting in an examiner's amendment that fully sets forth the agreement are excluded from the interview recordation procedures below.

The Interview Summary Form shall be given an appropriate paper number, placed in the right hand portion of the file, and listed on the "Contents" list on the file wrapper. In a personal interview, the duplicate copy of the Form is removed and given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephonic interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication.

The Form provides for recordation of the following information:

- Application Number of the application
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (personal or telephonic)
- Name of participant(s) (applicant, attorney or agent, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the claims discussed
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). (Agreements as to allowability are tentative and do not restrict further action by the examiner to the contrary.)
- The signature of the examiner who conducted the interview
- Names of other Patent and Trademark Office personnel present.

The Form also contains a statement reminding the applicant of his responsibility to record the substance of the interview.

It is desirable that the examiner orally remind the applicant of his obligation to record the substance of the interview in each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check a box at the bottom of the Form informing the applicant that he need not supplement the Form by submitting a separate record of the substance of the interview.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview:

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner. The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he feels were or might be persuasive to the examiner,
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete or accurate, the examiner will give the applicant one month from the date of the notifying letter to complete the reply and thereby avoid abandonment of the application (37 CFR 1.135(c)).

### Examiner to Check for Accuracy

Applicant's summary of what took place at the interview should be carefully checked to determine the accuracy of any argument or statement attributed to the examiner during the interview. If there is an inaccuracy and it bears directly on the question of patentability, it should be pointed out in the next Office letter. If the claims are allowable for other reasons of record, the examiner should send a letter setting forth his or her version of the statement attributed to him. If the record is complete and accurate, the examiner should place the indication "Interview record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**INTERVIEW 1/6/03**

Applicant: Koji Hanaoka et al  
Appl. No.: 09/284,735  
Filed: April 19, 1999  
For: DETERGENT-IMPREGNATED ARTICLE

**CLAIMS PENDING**

20. (Amended) A method for cleaning a hard surface comprising the steps of:

wiping a hard surface to be cleaned with a detergent-impregnated article comprising a base body and a detergent impregnated in said base body to apply said detergent to said hard surface and to release dirt from said hard surface, and then wiping said hard surface with a wiping sheet to remove said dirt and said detergent and to form a protective layer on said surface, and

wherein said detergent-impregnated article contains 50 to 5,000% by weight of said detergent, and said detergent comprises solid abrasive particles having a pencil hardness of 6B to 9H and are present in the detergent in an amount of 1 to 10% by weight, a protective layer-forming component and 50 to 98.9% by weight of water.

21. (Amended) A detergent-impregnated article comprising a base body and a detergent impregnated in said body, said detergent comprising solid abrasive particles having a pencil hardness of 6B to 9H and are present in the detergent in an

amount of 1 to 10% by weight, a protective layer-forming component and 50 to 98.9% by weight of water, and said base body containing 50 to 5,000% by weight of said detergent.

22. The detergent-impregnated article according to claim 21, wherein said solid abrasive particles consist of organic polymer particles and/or inorganic particles.

23. The detergent-impregnated article according to claim 21, wherein said solid abrasive particles comprise silicone or a water-insoluble inorganic substance.

24. The detergent-impregnated article according to claim 21, wherein said solid abrasive particles have an average primary particle size of 0.1 to 100  $\mu\text{m}$ .

25. The detergent-impregnated article according to claim 21, wherein said protective layer-forming component comprises silicone oil.

26. The detergent-impregnated article according to claim 21, wherein said base body is capable of absorbing 50 to 5000% by weight of said detergent based on its own weight with no load applied thereon.

27. The detergent-impregnated article according to claim

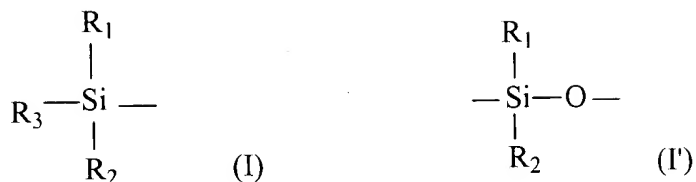
21, wherein said base body comprises paper, nonwoven fabric, woven fabric, knitted fabric, a pulp sheet or a porous structure.

28. The method according to claim 20, wherein a static friction coefficient of the surface to be cleaned on which a protective layer is formed is 0.1 to 1.0.

29. The detergent-impregnated article according to claim 21, wherein said solid abrasive particles consist of at least one of:

(A) at least one polymer obtained by polymerizing a monomer or monomer mixture containing at least one ethylenically unsaturated monomer selected from the group consisting of an alkyl acrylate or methacrylate having 1 to 8 carbon atoms in the alkyl moiety thereof, a mono- or dialkyl itaconate or fumarate having 1 to 5 carbon atoms in the alkyl moiety thereof, maleic anhydride, vinylidene chloride, styrene, divinylbenzene, vinyl chloride, vinyl acetate, vinyl acetal, ethylene, propylene, butene, butylene, methylpentene, butadiene, vinyltoluene, acrylonitrile, methacrylonitrile, acrylamide, acrylic acid, methacrylic acid, itaconic acid, fumaric acid, citraconic acid, crotonic acid,  $\beta$ -acryloxypropionic acid, or a hydroxyalkyl acrylate or methacrylate having 1 to 6 carbon atoms in the alkyl moiety thereof;

(B) a silicone rubber having at least one constituent unit selected from the group consisting of a unit represented by formula (I) and a unit represented by formula (I'):



wherein  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  each individually represent an alkyl, alkoxy or hydroxyalkyl group having 1 to 100 carbon atoms, a hydroxyl group, a carboxyl group, a carboxylalkyl group, an N-(2-aminoalkyl)aminoalkyl group, an aminoalkyl group, an amino group, an epoxyalkyl group, an epoxy group, a methylpolyoxyethylenealkyl group, a hydroxypolyoxy-ethylenealkyl group, a methylpolyoxyethylene polyoxypropylene group, a hydroxypolyoxyethylene polyoxypropylene group, an alkyl-polyoxypropylene group, a polyoxyethylene group, a phenyl group or a fluorinated alkyl group;

(C) at least one resin selected from nylon, polyester, an epoxy resin, an aminoalkyd resin, a urethane resin, polyacetal, and polycarbonate;

(D) an organopolysilsesquioxane; and

(E) at least one water-insoluble inorganic substance selected from silica, porous silica, sodium silicate glass, soda-lime glass powder, silicon carbide, a sheet silicate, quartz sand, aluminum oxide, magnesium oxide, titanium oxide, calcium carbonate, calcium

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phosphate, chromium oxide, emery, dolomite, mica powder, siliceous stone, kaolinite, halloysite, montmorillonite, illite, vermiculite, hectorite, bentonite, chitin powder, chitosan powder, and hydroxyapatite.

30. The detergent-impregnated article according to claim 21, wherein said solid abrasive particles have an average primary particle size of 0.01-10  $\mu\text{m}$ .

31. The detergent-impregnated article according to claim 21, wherein the solid abrasive particles are present in the detergent in an amount of 0.1 to 5% by weight.

POINTS OF DISCUSSION -

1) The Examiner has maintained the rejection of claims 20-28 under 35 U.S.C. 103(a) over JP 61-110 8700 (JP '700) in view of Lohr et al. U.S. Patent 4,347,151).

JP 61-110 8700 (JP '700), Lohr et al. (U.S. Patent 4,347,151), Wong et al. (U.S. Patent 5,213,588) and Feig (U.S. Patent 3,711,884)

2) JP '700 has prepared the cleaning article in such a way as to target the removal of oily stains

3) JP '700 fails to teach or suggest the use of solid abrasive particles for the removal of soil and dirt, as presently claimed.

4) Evidence of unexpected results over JP '700 -

Table<sup>A</sup>

	Dynamic Friction Coefficient in Wiping	Degree of Streaks (Gloss)	Static Friction Coefficient of Cleaned Surface	Degree of Staining (%)
Example 1	0.20	114	0.25	17
Comparative Example 1	0.50	110	0.30	21

A = The data can be found on page 31 of the specification.



5) Lohr et al. fail to teach or suggest these improved properties (dynamic friction coefficient in wiping, degree of streaks, static friction coefficient of cleaned surface and degree of staining) in the detergent-impregnated article as shown by the present inventors when the detergent-impregnated article includes solid abrasive particles, as presently claimed.

6) In the April 15, 2002 Amendment, we argued that Lohr et al. teach away from the use of the inventive detergent-impregnated article comprising 1-10 wt% of abrasive particles, since Lohr et al. prefer to use the abrasive agent in a relatively large amount of 10 to 15 wt%.

In response, the Examiner cited Wong et al. for teaching that the amount of scratches depends on the **shape** of the abrasive particles relative to the surface of the substrate to be cleaned, and not on the concentration of the abrasive particles. The Examiner refers to column 6, lines 3-10 of Wong et al.

6A) Is Wong et al. included in the rejection?

6B) Is the result effective variable the shape or the concentration of the abrasive particle?

6C) Wong et al. teach that the abrasive particles have a Knoop hardness of 4-25, and Wong et al. fail to teach or suggest that the abrasive particles have a pencil hardness of 6B to 9H, as presently claimed. The pencil hardness is a measure representing resistance to scratch when the surface of a sample is scratched

with a sharp-pointed pencil and scratches are marked on the surface. On the other hand, Knoop hardness is a measure representing resistance to collapse or breakage and is shown by the collapsed area of a sample when the sample is pressed by a stylus having a diamond tip. Thus, the correlation between the pencil hardness and Knoop hardness is definitely unknown. Considering the large difference in hardness between the materials used for measurement, i.e., pencil vs. diamond, the pencil hardness may be used to represent hardness of relatively softer materials like coated materials. Accordingly, the skilled artisan would be motivated to pick harder materials than the inventive abrasive particles, since the fact that Wong et al. measures the hardness of the abrasive particles using Knoop hardness implies that the abrasive particles are hard.

7) JP '700 and Lohr et al. are silent with respect to the inventive particle size range of 0.1 to 100 microns as described in present claim 24. The Examiner notes this deficiency and cites Feig for teaching that the particle size range is 1.5 to 60 microns.

7A) Is Feig actually part of the rejection?

7B) Feig teaches away from the presently claimed detergent-impregnated article which comprises the solid abrasive particles in an amount of 1 to 10% by weight. Feig does not generically teach a concentration range of the abrasive particles, therefore,

the skilled artisan must rely on the examples of Feig for guidance in preparing a detergent-impregnated article with solid abrasive particles. In examples II and IV, there is no overlap with the claimed concentration range. Although it is unclear with respect to example I, there may be no overlap.

Also, **the abrasive particles** used in the examples of Feig **are fixed to fabrics** by subjecting a pasty composition containing such particles prior to drying. In contrast, in the present invention, the impregnated article is in a wet state and the solid abrasive particles are supplied from the article onto a surface to be cleaned.

8) Regarding new claim 29, new claim 29 is patentable over the cited references, since new claim 29 is limited to a detergent-impregnated article wherein the solid abrasive particles do not include as a possibility, aluminosilicate or diatomaceous earth.